

# SPECIAL AIRWORTHINESS INFORMATION BULLETIN

Aircraft Certification Service  
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**Federal Aviation  
Administration**

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<http://www.faa.gov/aircraft/safety/alerts/SAIB>

*This is information only. Recommendations aren't mandatory.*

## Introduction

This Special Airworthiness Information Bulletin alerts you, owners, operators, and certificated repair facilities of **CFM International, S.A. Model CFM56-2, -3, & -5 engines** of issues regarding in-flight turnbacks resulting from the failure of variable bleed valve actuation shafts. These shafts transmit power from the hydraulic gear motor to the master ballscrew actuator to operate the variable bleed valve.

## Background

In April 2004, a flexshaft manufacturer was notified of possible failure of two flexshafts at one airline at 3500 cycles-since-new (CSN) and 3600 CSN. We have received reports of at least seven additional failures. Analysis at the airline determined that the failure might have been caused by either mis-alignment or over-torqueing of the flexshaft during installation. Either or both of these installation conditions can add additional loads, which can lead to failure of the flexshaft.

## Recommendations

We recommend that when installing any flexshaft (either a new replacement flexshaft or re-installing the flexshaft during a maintenance activity), you ensure the proper alignment of the flexshaft and that you use the correct torque values when tightening all fasteners and connections.

Following proper alignment and torqueing procedures will minimize additional loads on the flexshaft, thus reducing the risk of flexshaft failure and the potential for an in-flight turnback.

## For Further Information Contact

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